

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: September 18, 1996
Date Received: September 12, 1996
Project: 7238, Metro Self Monitor, PO #M60389
Date Samples Extracted: September 13, 1996
Date Extracts Analyzed: September 16, 1996

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL, ZINC**

USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M60389	0.56	0.63	0.62	0.10
Method Blank	<0.05	<0.05	<0.05	<0.05

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ENVIRONMENTAL CHEMISTS

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Project: 7238, Metro Self Monitor, PO #M60389

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL, ZINC BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Laboratory Code: 72641 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.56	0.58	4	0-20
Copper	mg/L (ppm)	0.63	0.64	2	0-20
Nickel	mg/L (ppm)	0.62	0.62	0	0-20
Zinc	mg/L (ppm)	0.10	0.11	10a	0-20

Laboratory Code: 72641 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	0.56	106	109	80-120	3
Copper	mg/L (ppm)	5	0.63	105	112	80-120	6
Nickel	mg/L (ppm)	10	0.62	105	107	80-120	2
Zinc	mg/L (ppm)	5	0.10	105	107	80-120	2

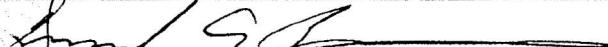
Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	110	108	80-120	2
Copper	mg/L (ppm)	5	113	110	80-120	3
Nickel	mg/L (ppm)	10	108	108	80-120	0
Zinc	mg/L (ppm)	5	107	108	80-120	1


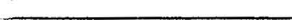
a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

KNJ HI
9-12-96
1:05am

Report To: Alaskan Copper Works Contact: Gerald A. Thompson
 Company: Alaskan Copper Works
 Address: 628 Hawthorne St.
 City: Seattle State: WA Zip: 98103
 Phone # (206) 382-8379 FAX # (206) 382-4309 Date 9/12

SITE NO.		PROJECT NAME		PURCHASE ORDER #	
7238		metro Self monitor		M 60309	
COLLECTORS (signature)				PROJECT LOCATION	
					
REMARKS				SAMPLE DISPOSAL INFORMATION	
				<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions	

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Dispatched by: 	GERALD Thompson	ACW	9/4/52	12:52
Received by: 	John P. Wright	F + B I	9-12-96	12:52
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D
Beth M. Albertson, M.S.
Bradley T. Benson
Kelley D. Wilt

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044

September 18, 1996

INVOICE # 96ACU0918-1
DUPLICATE COPY

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project 7238, Metro Self Monitor, PO #M60389: Results of testing requested
by Gerry Thompson, Project Manager for material submitted on September
12, 1996.

1 water sample analyzed for
Chromium, Copper, Nickel, Zinc
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due

\$ 65.00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044

September 18, 1996

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on September 12, 1996 from your 7238, Metro Self Monitor, PO #M60389 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson
Chemist

keh
Enclosures
FAX: 382-4309
ACU0918R.DOC